

## Department of Pesticide Regulation



Mary-Ann Warmerdam Director

#### MEMORANDUM

TO:

John S. Sanders, Ph.D.

Environmental Program Manager II Environmental Monitoring Branch

FROM:

Nan Gorder, Ph.D., Chief

Enforcement Branch

916-324-4265

DATE:

February 17, 2010

SUBJECT: FIELD INVESTIGATION - HEXAZINONE WELL SURVEY

On December 1, 2009, Leonard Herrera, a Program Specialist with the Pesticide Enforcement Branch Central Regional Office, and Craig Nordmark, an Environmental Scientist with the Environmental Monitoring Branch Ground Water Unit, conducted field investigation surveys near the town of Riverdale in Fresno County. The surveys were conducted to determine if hexazinone residues detected in three domestic wells near Riverdale had reached ground water as a result of legal agricultural use. The investigative reports are attached.

The areas were surveyed in accordance with the Report of Field Investigation of Pesticide Contamination Prevention Act Detection Area, Parts II and III. Staff surveyed approximately one-half mile around each domestic well where hexazinone had been detected for the presence of:

- Pesticide storage or production facilities,
- · Irrigation drainage ditches, canals, pits or ponds,
- Facilities for washing and / or rinsing pesticide application equipment, and/or
- · Pesticide containers.

Staff did not find any pesticide storage or production facilities; irrigation drainage ditches, pits, ponds or canals; pesticide application equipment washing or rinsing facilities; or hexazinone containers in the areas surrounding these domestic wells. Two features, an unlined canal and a dry pond were examined and determined not to be used for collecting agricultural runoff. The unlined irrigation supply canal runs within 100 feet of two of the wells. The dry pond is approximately 0.3 miles from one of the wells.

#### Attachments

cc: Karen Francone, Environmental Program Manager I, Enforcement Branch Leonard Hererra, Program Specialist, Enforcement Branch Craig Nordmark, Environmental Scientist, Environmental Monitoring Branch

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I.	Date Refer	red PUE: _	Nove	mber 5, 2009	<u> </u>	Detect	tio	n Report #	# <u>Loc</u>	1041			_
	Date Investigation Due: Chemical Detected: <u>Hexazinone</u>							-					
	Site of Dete	Site of Detection (List township/range/section as well as address with nearest cross street)											
	Fresno Cou	Fresno County - South East West Grantline Ave and Valentine Ave											
	Sec 36- Toy	wnship 17s	-Range	19e									_
													_
	Chemical v	vas detecte	d in	(x) Ground	d Wate	r	(	) Soil at _			d	lepth	
	Check any	of the follo	owing w	hich apply to	o this c	hemica	al:						
	( ) Placed	in Reevalu	ation				(	) On Rest	trict M	laterials	Lis	t	
	(x) On G	round Wate	er Prote	ction List		( ) Toxic Air Contaminant							
	( ) Other _												
II.	Contact the	e appropria	te Coun	ty Agricultu	ral Con	nmissio	on	er's Office	2				
	Name: Lou	ie Guerra		Γ	Title: <u>S</u> ı	<u>ipervis</u>	in	g Ag Stan	dards S	Spec			
	Date Conta	cted: <u>Dece</u>	ember 2	, 2009									
III	. Investigation	on of gener	ral area	surrounding	positiv	e wells	S						
	Date of Inv	estigation:	_Decei	mber 1, 2009	)								
	contaminat including p within ¼ m	ed well is lossible pointed of the volume of	located int sour well ext	y driving aro and on roads ces. If a well ending into t e describe in	within is loca he adja	the sected near	cti ar a ecti	ion, to reco a section b ion also. It	ord not ounda f the at	table ob ry, exar nswer to	serv nine an	the are	a
	1. Are any pesticide storage or production			on faci	ilit	ties presen	t?	Yes (	( )	No (X)			
	2.	2. Are there any drainage ditches, pits,			or cana	ıls	present?		Yes (	( )	No (X)	)	
	3. Are there any facilities for washing/rinsing pesticide application equipment or containers present?				Yes (		No ( X)	)					
	Report Prepared by: <u>Leonard Herrera</u>												
	Report Prepared on: _December 21, 2009 Sent to EM on: December 21, 2009												

Additional Observation Sheet Detection Report #	<sup>‡</sup> Loc 1041
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Observations. List all pertinent information for all notable items: Township/range/section, address, distances to cross street, coordinates, etc. Descriptions or a detailed sketch may be used.

Loc 1041 is adjacent to a residence, with agricultural fields within 100 feet in to the west and east. The well is located approximately 75 feet west of Valentine Ave. and 220 feet south of West Grantline Ave. Photographs showing the location and surrounding area will be submitted at a later time

I.	Date Referred PUE:November 5, 2009 Detection Report # _Loc 1042	_				
	Date Investigation Due: Chemical Detected: <u>Hexazinone</u>	_				
	Site of Detection (List township/range/section as well as address with nearest cross street)					
	Gresno County - Approximately 1/4 mile North of Excelsior Ave East side of Valentine Ave.					
	Sec 36 – Township 17s – Range 19e					
	Chemical was detected in (x) Ground Water () Soil atdepth					
	Check any of the following which apply to this chemical:					
	) Placed in Reevaluation ( ) On Restrict Materials List					
	x ) On Ground Water Protection List ( ) Toxic Air Contaminant					
	) Other					
II.	Contact the appropriate County Agricultural Commissioner's Office					
	Vame: Louie Guerra Title: Supervising Ag Standards Spec.					
	Date Contacted: December 2, 2009					
III	nvestigation of general area surrounding positive wells					
	Date of Investigation: _December 1, 2009					
	Examine the detection area by driving around the perimeter of the section in which a ontaminated well is located and on roads within the section, to record notable observations including possible point sources. If a well is located near a section boundary, examine the are within ½ mile of the well extending into the adjacent section also. If the answer to any questions below is yes, please describe in detail on the observation sheet. Attach additional heets if required.	a				
	. Are any pesticide storage or production facilities present? Yes ( ) No $(X)$					
	Are there any drainage ditches, pits, or canals present? Yes ( ) No (X	)				
	Are there any facilities for washing/rinsing pesticide application equipment or containers present? Yes ( ) No ( X	)				
	Report Prepared by: <u>Leonard Herrera</u>					
	Report Prepared on: _December 21, 2009 Sent to EM on: December 21, 2009					

	Additional Observation Sheet	Detection Report # Loc 1042	
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Observations. List all pertinent information for all notable items: Township/range/section, address, distances to cross street, coordinates, etc. Descriptions or a detailed sketch may be used.

Loc 1042 is adjacent to the site of the original farm house which is no longer present. It currently serves two residences across an unlined irrigation supply canal to the north. The well is approximately 190 feet east of Valentine Ave, and 880 feet north of Excellsior Ave. Photographs showing the location and surrounding area will be submitted at a later time

I.	Date Referr	red PUE: <u>Noveml</u>	ber 5, 2009	<b>Detection Report</b>	# <u>Loc 1043</u>			
	Date Invest	igation Due:		_ Chemical Detecte	ed: <u>Hexazinone</u>			
	Site of Dete	Site of Detection (List township/range/section as well as address with nearest cross street)						
	Fresno Cou	Fresno County - West side of South Marks Ave South side of Lewiston Ave						
	<u>Sec 36 – To</u>	ownship 17s – Rang	e 19e					
	Chemical w	as detected in (	x ) Ground Wate	r ( ) Soil at		depth		
	Check any	of the following wh	ich apply to this c	hemical:				
	( ) Placed	in Reevaluation		( ) On Res	trict Materials Li	st		
	(x) On Gr	ound Water Protect	ion List	( ) Toxic A	Air Contaminant			
	( ) Other _							
II.	Contact the	appropriate County	Agricultural Cor	nmissioner's Offic	e			
	Name: Lou	ie Guerra	Title: <u>S</u> 1	pervising Ag Stan	dards Spec			
	Date Conta	cted: December 2, 2	2009					
III	. Investigation	on of general area su	irrounding positiv	e wells				
	Date of Inv	estigation: <u>Decem</u>	ber 1, 2009					
	contaminate including p within ¼ m	e detection area by ed well is located ar ossible point source ile of the well extenelow is yes, please quired.	nd on roads withings. If a well is localed into the adjacet	the section, to rec ted near a section l cent section also. I	ord notable obsert boundary, examin f the answer to a	rvations ne the area ny		
	1.	Are any pesticide s	torage or producti	on facilities preser	rt? Yes (	No (X)		
	2.	Are there any drain	age ditches, pits,	or canals present?	Yes (	No (X )		
	3. Are there any facilities for washing/rinsing pesticide application equipment or containers present? Yes ( )				No ( X)			
	Report Prepared by: <u>Leonard Herrera</u>							
	Report Prep	pared on: _Decembe	er 21, 2009	Sent to EM on: De	ecember 21, 2009	<u></u>		

Detection Report # \_\_Loc 1043

## REPORT OF FIELD INVESTIGATION OF PCPA DETECTION AREA

Additional Observation Sheet

Observations. List all pertinent information for all notable items: Township/range/section,
address, distances to cross street, coordinates, etc. Descriptions or a detailed sketch may be used.
Loc 1043 is adjacent to a residence, an unlined irrigation supply canal, and agricultural fields.
The well is located approximately 450 feet west of Marks Ave. and 90 feet south of Lewiston
Ave. Photographs showing the location and surrounding area will be submitted at a later time



### Department of Pesticide Regulation



Original signed by

#### MEMORANDUM

TO:

John S. Sanders, Ph.D.

Environmental Program Manager II Environmental Monitoring Branch

FROM:

Nan Gorder, Ph.D., Chief

Enforcement Branch

916-324-4265

DATE:

June 2, 2010

SUBJECT: FIELD INVESTIGATION – HEXAZINONE WELL SURVEY

On February 25, 2010, Eric Smith, a Staff Environmental Scientist with the Pesticide Enforcement Branch Northern Regional Office, and Craig Nordmark, an Environmental Scientist with the Environmental Monitoring Branch Ground Water Unit, conducted field investigation surveys near the town of Tracy in San Joaquin County. The surveys were conducted to gather evidence in an effort to determine if hexazinone residues detected in two domestic wells near Tracy had reached ground water for reasons other than legal agricultural use of the herbicide. The investigative reports are attached.

The areas were surveyed in accordance with the Report of Field Investigation of Pesticide Contamination Prevention Act Detection Area, Parts II and III. Staff surveyed approximately one-half mile around each domestic well where hexazinone had been detected for the presence of:

- Pesticide storage or production facilities,
- Irrigation drainage ditches, canals, pits or ponds,
- Facilities for washing and/or rinsing pesticide application equipment, and/or
- Pesticide containers.

Staff found what appeared to be an old pesticide sales facility. The history of this facility is being investigated. Staff also found irrigation drainage ditches, pits, ponds and canals. Not observed were pesticide application equipment; washing or rinsing facilities; or hexazinone containers in the areas surrounding these domestic wells. Some of the drainage ponds examined were determined to be used for collecting agricultural runoff. The unlined irrigation supply canal was more than a mile from the two of the wells. Close to the contaminated wells, several areas with standing water and areas created to contain runoff were observed.

#### Attachments

cc: Jim Shattuck, Environmental Program Manager I (w/Attachments)
Eric Smith, Staff Environmental Scientist (w/Attachments)
Craig Nordmark, Environmental Scientist (w/Attachments)

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I.	Date Referred PUE:January 27, 2010	Detection Report # _Loc 3904				
	Date Investigation Due:	Chemical Detected: <u>Hexazinone</u>				
	Site of Detection (List township/range/section	as well as address with nearest cross street)				
	San Joaquin Co Approximately 139 feet mil	e North of Lovey Rd., 280 feet east of Bird Rd.				
	Sec 30 – Township 02s – Range 06e					
	Chemical was detected in ( $\boldsymbol{x}$ ) Ground Water	( ) Soil atdepth				
	Check any of the following which apply to thi	s chemical:				
	( ) Placed in Reevaluation	( ) On Restrict Materials List				
	(x) On Ground Water Protection List	( ) Toxic Air Contaminant				
	( ) Other					
II.	Contact the appropriate County Agricultural C	Commissioner's Office				
	Name: Scott Hudson Tit	le: San Joaquin Agricultural Commissioner				
	Date Contacted: CAC Staff declined to accom	pany DPR along on the 2/25/10 field survey.				
Ш	Investigation of general area surrounding posi-	tive wells				
	Date of Investigation: 2/25/10					
	Examine the detection area by driving around contaminated well is located and on roads with including possible point sources. If a well is low within ½ mile of the well extending into the acquestions below is yes, please describe in detay sheets if required.	hin the section, to record notable observations ocated near a section boundary, examine the area djacent section also. If the answer to any				
	1. Are any pesticide storage or production fa	acilities present? Yes ( ) No (X)				
	2. Are there any drainage ditches, pits, or car	nals present? Yes (x) No ()				
	3. Are there any facilities for washing/rinsing application equipment or containers present					
	Report Prepared by: Eric Smith					
	Report Prepared on:5/6/10_					
	Sent to EM on: <u>5/6/10</u>					

Additional Observation Sheet	Detection Report #Loc 3904

Observations. List all pertinent information for all notable items: Township/range/section, address, distances to cross street, coordinates, etc. Descriptions or a detailed sketch may be used.

The well is located to behind the residence. No point sources were located within ¼ mile. The residence is surrounded by agricultural fields, the closest within 40 feet to the south of the well. These fields were fallow or had a grain crop planted at the time of the survey. A set of two interconnected runoff collection ponds are located 360 feet to the west. A larger pond is located 800 feet to the northwest. This latter pond is used to collect runoff from an adjacent industrial vehicle yard.

There is a facility located ½ mile to the south of the well along Bird Rd. that may have handled pesticides for sale in the past. The history of this facility is currently being researched by San Joaquin County staff and any pertinent information found will be added to this document when it becomes available.

I.	Date Referred PUE:	Detection Report # _ <u>Loc 3911</u>				
	Date Investigation Due: March 03, 201	O Chemical Detected: <u>Hexazinone</u>				
	Site of Detection (List township/range/section as well as address with nearest cross street)					
	San Joaquin Co Approximately 164 fee	et south of Grantline Rd., 0.1 mile east of Bird Rd.				
	Sec 19 – Township 02s – Range 06e					
	Chemical was detected in ( $\boldsymbol{x}$ ) Ground W	Vater ( ) Soil atdepth				
	Check any of the following which apply	to this chemical:				
	( ) Placed in Reevaluation	( ) On Restrict Materials List				
	(x) On Ground Water Protection List	( ) Toxic Air Contaminant				
	( ) Other					
II.	Contact the appropriate County Agricultu	ral Commissioner's Office				
	Name: Scott Hudson 7	itle: San Joaquin Agricultural Commissioner				
	Date Contacted: _CAC Staff declined to accompany DPR along on the 2/25/10 field					
	survey					
III	. Investigation of general area surrounding	positive wells				
	Date of Investigation:					
	2/25/10					
	contaminated well is located and on road including possible point sources. If a wel within ¼ mile of the well extending into	bund the perimeter of the section in which a s within the section, to record notable observations I is located near a section boundary, examine the are the adjacent section also. If the answer to any detail on the observation sheet. Attach additional				
	1. Are any pesticide storage or p	production facilities present? Yes ( ) No ( X)				
	2. Are there any drainage ditche	es, pits, or canals present? Yes (X) No (				
	3. Are there any facilities for wa application equipment or con	0 01				
	Report Prepared by: <u>Eric Smith</u>					
	Report Prepared on: 5/6/10	Sent to EM on: 5/6/10				

Additional Observation Sheet	Detection Report # Loc 3911	
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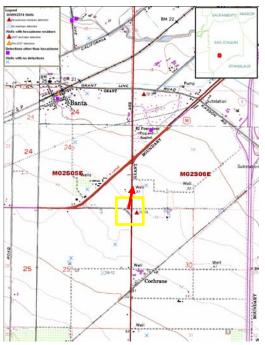
Observations. List all pertinent information for all notable items: Township/range/section, address, distances to cross street, coordinates, etc. Descriptions or a detailed sketch may be used.

The well was located in the front yard of residence on the northern edge of an area of ranch style homes on large lots. No point sources for pesticides were noted

The nearest agricultural field was located across the Grantline Road, 200 feet to the north. This field has been planted in alfalfa at various times in the past.

A irrigation canal/ditch was located about 275 feet north of the well. This feature appeared to function both for water supply and collection of field runoff.





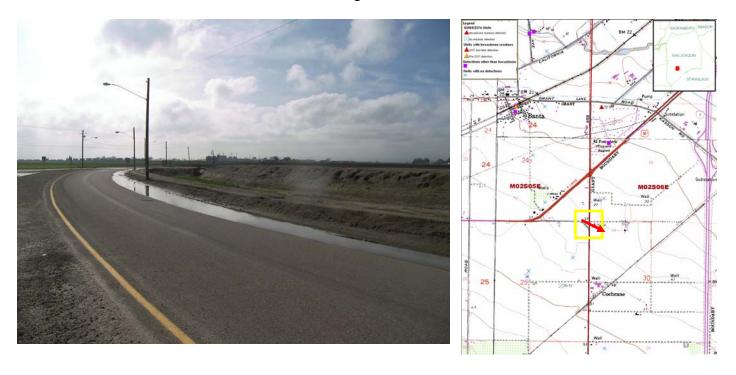
Filled culvert/pipe output connecting 2 runoff ponds in NE corner of section 25. Pond was vegetation filled and smaller than the manicured pond on the other side of the road. Location 3904 is the white house in the picture below.







Picture above and below shows the larger of 2 connected ponds in the NE corner of section 25. Connection runs under the road. Ponds collect water from the large field to the SW.

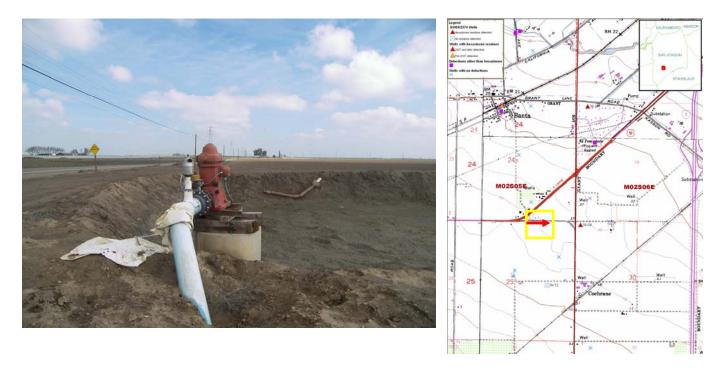




Two pictures looking west of a large runoff pond in the SE corner of section 24. This pond drains an industrial/vehicle yard area to the north. No agricultural drainage was noted



#### Attachment 3 – Site Inspection Photographs and Maps



Large runoff pond in the north central area of Section 25. Pump appears to be used to recycle water from the pond back to the field





## Department of Pesticide Regulation



*Original signed by* 

Mary-Ann Warmerdam Director

#### MEMORANDUM

TO: Lisa Ross, Ph.D.

Environmental Program Manager I Environmental Monitoring Branch

FROM: Craig Nordmark

**Environmental Scientist** 

**Environmental Monitoring Branch** 

916-324-4138

DATE: October 7, 2010

SUBJECT: RESULTS OF THE INVESTIGATION OF THE PESTICIDE FACILITY SOUTH

OF THE WELL WITH HEXAZINONE RESIDUES IN SAN JOAQUIN COUNTY

IN SECTION 02S/06E-30

Hexazinone residues were detected in a well San Joaquin County in section 02S/06E-30 east of Tracy during sampling done as part of study GW09. A field survey to identify potential point sources of contamination was conducted by me and Eric Smith of the Enforcement Branch on February 25, 2010. At that time a potential pesticide handling facility was identified approximately 0.5 miles south of the well. Old signage on some of the buildings indicated that the facility had at one time been a commercial enterprise but no history was known. The San Joaquin Agricultural Commissioner's Office was asked to determine the history of the facility.

On July 16, 2010, I received a voice mail from Tom Reed, Assistant Agricultural Commissioner detailing the results of his investigation. The facility had originally been named Rhodes Bean and Supply. He contacted the previous owners and was told that they had never sold hexazinone and that no repackaging of pesticides was done at that facility.

This information should eliminate this facility as a potential point source of the hexazinone residues.

cc: Lisa Quagliaroli

